# Koch, Kristine

From: Koch, Kristine

**Sent:** Monday, January 25, 2016 10:58 AM

To: 'Gene Revelas'

Cc: 'Wyatt, Robert'; 'Patty Dost (pdost@pearllegalgroup.com)'; 'Jen Mott'; Allen, Elizabeth

(allen.elizabeth@epa.gov)

**Subject:** RE: Final RI Revisions

# Gene – The proposed change is acceptable.

Kristine Koch Remedial Project Manager USEPA, Office of Environmental Cleanup

U. S. Environmental Protection Agency Region 10 1200 Sixth Avenue, Suite 900, M/S ECL-122 Seattle, Washington 98101-3140

(206)553-6705 (206)553-8581 (fax)

1-800-424-4372 extension 6705 (M-F, 8-4 Pacific Time, only)

From: Gene Revelas [mailto:grevelas@integral-corp.com]

**Sent:** Monday, January 25, 2016 10:06 AM **To:** Koch, Kristine < Koch.Kristine@epa.gov>

Cc: 'Wyatt, Robert' <rjw@nwnatural.com>; 'Patty Dost (pdost@pearllegalgroup.com)' <pdost@pearllegalgroup.com>;

'Jen Mott' <jmott@anchorqea.com> **Subject:** RE: Final RI Revisions

Kristine -

We've identified one more requested change. On page ES-6 of the Executive Summary, we would like to strikeout the word "residential" in the following paragraph.

### Sources of Contamination

Historical releases of contaminants contributed to the majority of the observed chemical distribution in sediments within the study area. Contaminants from upland areas have entered the river system as direct discharges through stormwater and wastewater outfalls, from overwater releases and spills, and indirectly through overland flow, bank erosion, groundwater, and other nonpoint sources. In addition, contaminants from regional sources have reached the study area through inputs of surface water and sediment from upstream and through atmospheric deposition. Historical and current sources responsible for the existing contamination include, but are not limited to, ship building, repair, and dismantling; wood treatment and lumber milling; storage of bulk fuels and manufactured gas production; chemical manufacturing and storage; municipal combined sewer overflows; and stormwater from industrial, commercial, transportation, residential, and agricultural land uses.

Section 4 of the Final RI states that residential land comprises a very small percentage of the overall drainage area to the harbor, and that analyte concentrations in storm water from residential and open space were generally lower than other land use types. Section 4 excepts include:

## p. 4-13, "Identification of Sources"

As discussed in Section 6, based on LWG studies, it is clear such storm water picks up COIs as it flows across industrial and commercial properties with outdoor process activities, across transportation corridors and residential neighborhoods that have vehicular traffic and parking, and even across open spaces that are subject to atmospheric deposition. Of the developed land, the industrial land use was dominant. COIs associated with industrial wastewater (described above) could also be found in runoff from these sites, as storm water comes into contact with industrial operations. As shown on Maps 3.2-14 through 3.2-19, residential, commercial, and major transportation land uses historically comprised a smaller percentage of the overall drainage.

# . p. 4-14, "Identification of Sources"

Analyte concentrations collected from Open Space and Residential land uses were generally lower than other land uses. JSCS values for storm water were exceeded in every land use sampled for at least some chemicals. The analysis of this data in terms of projected loads (which takes into account acreage of the various land use types) is contained in Section 6.

We feel this deletion is consistent with the RI findings and that including it in the Executive Summary in parallel with the other sources listed is misleading. I will call you later today to discuss.

Thanks,

### Gene

Gene Revelas | Senior Managing Scientist
Integral Consulting Inc. | www.integral-corp.com
1205 West Bay Drive NW | Olympia, WA 98502

Tel: 360.705.3534, ext. 418 | Cell: 360.870.4950 | Fax: 360.705.3669

HEALTH ENVIRONMENT TECHNOLOGY SUSTAINABILITY

From: Gene Revelas

**Sent:** Friday, January 22, 2016 2:06 PM **To:** Koch, Kristine (Koch, Kristine@epa.gov)

Cc: 'Wyatt, Robert'; Patty Dost (pdost@pearllegalgroup.com); Jen Mott

Subject: Final RI Revisions

Hi Kristine -

There are two EPA edits in the Final RI that we would like to revise for accuracy.

1. Section 3: page 3-74. EPA added "pencil pitch" where shown in strike out below implying that it was a current commodity handled by the Port. The Port (Kelly Madalinski) has pointed out that pencil pitch was handled at Terminal 4 from 1978 to 1998 only by Jones Oregon Stevedoring and Hall-Bull Marine. So we suggest pencil pitch be moved in the paragraph as indicated.

The Port of Portland facilities have had a prominent presence in the maritime commodities shipping industry in Portland Harbor since 1891. Over the years, export/import of agricultural products, dry/liquid bulk products (e.g., pencil pitch), forest products, and other bulk commodities have passed through Port facilities (Terminals 1, 2, 4, and 5). Currently, the Port operates two deep-water marine terminals, Terminals 4 and 5, within the study area that handle thousands of tons of cargo each week. Major exports handled at Terminals 2 and 4 (Map 3.2-20) include pencil pitch, wheat, soda ash, potash, and compressed hay. The Port's operations in Portland Harbor constitute the third-largest export center for grain in the world and the largest wheat export port in the United States (Williams 2007). Major imports include automobiles, steel, and limestone.

2. Section 10: page 10-3: EPA added some specific numbers to the following statement, but we get different sample counts for the winter retrieval (Q1) and fall retrieval (Q4). For your convenience the cited Table 5.3-1 is inserted below. We propose the following edit:

Sediment accumulation data from the sediment traps provides information on the mobile sediment loads at the site. Table 5.3-1 presents data showing that sediment accumulation rates in sediment traps placed throughout the site in 20067 and 2009 range from less than 1 cm to approximately 69 cm per quarter. MostTwelve Of the 16 traps deployed in the fall of 2006, all 13 retrieved in the winter of 2007 and 11 of the 16 retrieved in the fall of 2007 and all eight of the 16 traps deployed in the winter had accumulations exceeding 5 cm per quarter.

Table 5.3-1. Average Heights of Sediment Collected in Sediment Traps Deployed in Willamette River (2007 & 2009).

Location	River Mile <sup>a</sup> (East or West Side)	Initial Deployment Date	Date Sampled Q1	Average Sediment Height (cm)	Date Sampled Q2	Average Sediment Height (cm)	Da Sam Q
LWG Sedim	ant Tuana						
ST001	1.9E	10/31/2006	1/30/2007	7	5/1/2007	$2.4^{\rm b}$	8/16/
ST001	1.8W	10/31/2006	1/30/2007	14.6	5/1/2007	5.1	8/16/
ST002 ST003	1.8 w 2.9 (Multnomah	10/31/2006	2/1/2007	14.6 17.1	5/1/2007	3.1 4.6	8/16/
\$1005	Channel)	10/31/2000	2/1/2007	17.1	3/1/2007	4.0	8/10/
ST004	6.0E	11/1/2006	1/30/2007	11.6	4/30/2007	4.2	8/8/2
ST005	6.0W	10/31/2006	1/30/2007	27.7	4/30/2007	10.2	8/8/2
ST006	9.0 (Swan Island Lagoon)	11/1/2006	sampler not found		5/1/2007	< 1 <sup>b</sup>	8/16/
ST007	11.3E	11/2/2006	1/31/2007	37.4	4/30/2007	10	8/17/
ST008	11.5W	11/1/2006	1/31/2007	69.1	4/30/2007	16	8/17/
ST009	15.7E	11/2/2006	2/2/2007	6.3	4/30/2007	10.7	8/17/
ST010	15.6W	11/2/2006	2/2/2007	52.3	4/30/2007	9.7	8/17/
ST011	3.5E	10/31/2006	2/1/2007	8.8	5/2/2007	3.4	8/16/
ST012	4.5W	10/31/2006	2/1/2007	23.9	5/2/2007	6.8	8/16/
ST013	6.7E	11/1/2006	2/1/2007	8.2	4/30/2007	1.6 <sup>b</sup>	8/16/
ST014	7.5W	10/30/2006	sampler not found		sampler not found		8/16/
ST015	9.7W	10/30/2006	1/31/2007	20	5/1/2007	3.9	8/17/
ST016	9.9E	11/1/2006	sampler not found		5/1/2007	7	8/17/
City of Portla	and RM 11E Sedimen	t Traps					
ST001	11 E	6/25/2009					9/21/
ST002	11.2 E	6/25/2009					9/21/
ST003	11.3 E	6/25/2009					9/21/
ST004	11.5 E	6/25/2009					9/21/
ST005	11.7 E	6/25/2009					9/21/
ST006	11.8 E	6/25/2009					9/22/
ST007	12.1 E	6/25/2009					9/22/

## **Notes:**

<sup>&</sup>lt;sup>a</sup> Based on site characterization and risk assessment (SCRA) data.

<sup>&</sup>lt;sup>b</sup> Samples not collected; re-deployed with existing sediment.

Please let us know if you agree with these changes.

Thanks,

# Gene

Gene Revelas | Senior Managing Scientist
Integral Consulting Inc. | www.integral-corp.com
1205 West Bay Drive NW | Olympia, WA 98502

Tel: 360.705.3534, ext. 418 | Cell: 360.870.4950 | Fax: 360.705.3669

HEALTH ENVIRONMENT TECHNOLOGY SUSTAINABILITY